



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,986	08/25/2006	Tor Brekke	2440.0010001/MAC	2477

26111 7590 04/13/2009
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

MCLAREN, STEPHANIE D

ART UNIT	PAPER NUMBER
----------	--------------

3744

MAIL DATE	DELIVERY MODE
-----------	---------------

04/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,986	Applicant(s) BREKKE, TOR	
	Examiner STEPHANIE MCLAREN	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is issued in response to the amendment filed on November 18, 2008.

Specification

The specification is objected to for the following informalities: There should be no reference to claim numbers within the specification. Appropriate correction is required. Also, subtitles for some portions of the specification appear to be missing subtitles. Please the list attached for recommended headings and subtitles.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

Claim Objections

1. Claim 21 is objected to because of the following informalities: "of in the form of" should be "of" or "in the form of". Appropriate correction is required.
2. Claim 31 is objected to because of the following informalities: "a ice slurry" should be "an ice slurry". Appropriate correction is required.

Art Unit: 3744

3. Claim 32 is objected to because of the following informalities: There appears to be a dangling phrase "wherein the at least one treatment tank", which does not have subject. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 31 is rejected under 35 U.S.C. 102(b)] as being anticipated by Goldstein (4,912,935).

With regards to claim 31, Goldstein teaches: A system for tempering at least one packaged product unit utilizing a ice slurry comprising water and ice particles, the system comprising: at least one treatment tank (12) for submerging the at least one packaged product unit, wherein the at least one treatment tank comprises an upper part with an overflow trough (ice outlet 40); at least one injection nozzle (at the end of recycle pipe 48); a pipe connecting the overflow trough and the at least one injection nozzle (recycle pipe 48); and a pump (pump 44) associated with the pipe capable of pumping ice slurry present in the overflow trough through the pipe and injecting the ice slurry back into the at least one treatment tank through the at least one injection nozzle so as to circulate the ice slurry in the at least one treatment tank around the at least one packaged product unit in order to cool the at least one packaged product unit.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18, 20, 23, 25, 26, 27, 28, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (4,249,388) in view of Goldstein.

With regards to claim 18, Burns discloses: placing the at least one packaged product unit in the treatment tank (carton, 58); and circulating fluid “around the at least one packaged product unit in order to cool the at least one packaged product unit” (wherein fluid circulates as the carton is filled via injection nozzle (probe 27)).

Burns fails to disclose: A method for tempering at least one packaged product unit in a treatment tank, the method comprising: introducing an ice slurry comprising water and ice particles into the treatment tank; circulating the ice slurry in the treatment tank wherein the ice slurry present in an overflow trough located at an upper part of the treatment tank is pumped through a pipe connected to the overflow trough and injected back into the treatment tank through at least one injection nozzle. Goldstein teaches: A method for tempering at least one packaged product unit in a treatment tank, the method comprising: introducing an ice slurry comprising water and ice particles into the

Art Unit: 3744

treatment tank (12, via slurry inlet 14); circulating the ice slurry in the treatment tank (through recirculation via recycle pipe 48) wherein the ice slurry present in an overflow trough (ice outlet 40) located at an upper part of the treatment tank (see fig. 1) is pumped (via pump 44) through a pipe connected to the overflow trough and injected back into the treatment tank (recycle pipe 48) through at least one injection nozzle (or equivalent).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Burns by using a treatment tank similar to the device of Goldstein, because it allows for constant recirculation of the fluid within the treatment tank, as well as allowing for a central re-supply mechanism even when in transit. The combination of these two factors results in significantly lower temperatures for longer periods of time, essential for meat products such as the chickens described in Burns.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Burns in view of Goldstein to include the step of packaging the product units so as to prevent loose portions of the products from contaminating the ice slurry and each other, because with the use of the system of Burns with products such as the chickens of Burns it becomes essential that the products remain individually sealed.

With regards to claim 20, Goldstein teaches: wherein there are at least three injection nozzles (recycle pipe 48, slurry inlet 14, makeup water inlet 25).

Art Unit: 3744

With regards to claim 23, Burns fails to disclose: wherein when the temperature of the ice slurry reaches approximately 0.5 degrees Celsius additional ice slurry is introduced into the treatment tank from a supply tank in which the ice slurry is prepared with an adequate ratio of ice particles from an ice machine. However, it would have been a mechanically expedient decision to increase the level of ice when the temperature in the tank reached slightly above freezing, such as 0-1 degrees Celsius, because it is the subzero temperature of the treatment tanks which tempers the products most expediently. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to include in the invention of Goldstein an upper temperature limit at which more ice would be entered so as to ensure efficient operation.

With regards to claim 25, Burns discloses: wherein the ice slurry in the supply tank is kept in a condition which allows for pumping by stirring it with a paddle mechanism (see fig. 2).

With regards to claim 26, Burns discloses: wherein the ice slurry is circulated between a number of treatment tanks (cartons) for product units (contained in the cartons) in series or in parallel and an ice slurry supply tank (11) for tempering of the product units.

Art Unit: 3744

With regards to claim 27, Burns discloses: wherein the treatment tanks (cartons) are utilized in order, one after the other (as they move along conveyer 20).

With regards to claim 28, Burns in view of Goldstein fail to explicitly disclose: wherein the at least one packaged product unit comprises a vacuum packed product. However, it would have been obvious to one having ordinary skill in the art at the time of the invention as given by Burns in view of Goldstein to package the products in a watertight way, because otherwise some of the juices and lose pieces of the products might become entrapped in the liquid ice and contaminate it. Vacuum packaging is one such method. This is especially vital with products such as the chickens of Burns.

With regards to claim 29, Burns discloses: wherein the vacuum packed product comprises a food stuff (vegetables, chickens, see abstract).

With regards to claim 30, Burns discloses: wherein the at least one packaged product unit is a plurality of vacuum packed products (59, see fig. 4).

Burns in view of Goldstein fail to disclose: the method further comprising the following sequential steps: heating the plurality of vacuum packed products hanging side by side on a rack; transporting the rack with the plurality of vacuum packed products to the treatment tank; submerging the rack and the plurality of vacuum packed products in the treatment tank; and cooling the plurality of vacuum packed products for a predetermined period of time.

Art Unit: 3744

Heating of vacuum packed products to seal and sanitize them is well known in the art. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include in the invention of Burns in view of Goldstein a step of subjecting the packaged product units to a heat treatment routine, to ensure the death of any harmful bacteria.

After the heat treatment routine, the packaged products would need to be immediately cooled, therefore the rack or racks (the use of which in transport of food stuffs is well known in the art as a method of preventing damage to the products) containing the packaged products would need to be sent to and submerged in the treatment tank. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Burns in view of Goldstein to include the step of transporting the packaged product units from the heat treatment location to the treatment tanks, and placing them in the treatment tanks to be cooled, because after heat treatment a soft freeze is should immediately be begun to prevent spoilage and the growth of bacteria.

8. Claims 32, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldstein in view of Burns (4,249,388).

With regards to claim 32, Goldstein fails to disclose: a supply tank, in which the ice slurry is prepared, connected to the at least one treatment tank wherein the at least one treatment tank; and means for circulating the ice slurry between the at least one

Art Unit: 3744

treatment tank and the supply tank. Burns teaches: a supply tank (11), in which the ice slurry is prepared, connected to the at least one treatment tank (carton) wherein the at least one treatment tank; and means for circulating the ice slurry between the at least one treatment tank and the supply tank (pipes 18, 24 and 41).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Goldstein by the device of Burns to include a central supply tank connected to at least one treatment tank, because it allow for greater expandability of a single system.

With regards to claim 33, Burns teaches: a transport organ for continual transport of the at least one packaged product unit to the at least one treatment tank for cooling with suspension for a required period of time (wherein a transport organ loads the product units into the treatment tank, which is then conveyed along conveyer 20).

With regards to claim 34, Goldstein in view of Burns fail to disclose: a rack on which the at least one packaged product unit hangs while submerged in the at least one treatment tank. None the less it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Goldstein in view of Burns to provide such a rack within the treatment tank, as such a structure is commonly used during loading of product units into cartons, to prevent damage to the product units.

Art Unit: 3744

9. Claims 19, 21, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns in view of Goldstein as applied to claim 18 above, further in view of Borrup et al. (WO 99/21429).

With regards to claim 19, Burns fails to disclose: wherein the ice slurry is 25% ice particles and has a temperature of -2.5 degrees Celsius. Borrup teaches that an ice slurry of 10 % to 30 % ice (pg. 7, line 8-9) will have a temperature of -2 - -20 degrees Celsius (pg. 3, line 21-23) depending on salt content. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to select values for the ice slurry of Goldstein which are within these ranges for best results in order to efficiently soft freeze the products being tempered, because the optimization of a number of variables for a desired purpose from within given ranges is held to be within the ordinary level of skill in the art.

With regards to claim 21, Borrup teaches: wherein the water is a saline brine of in the form of a mixture of salt dissolved in fresh water comprising approximately 2% salt (for the ice slurry of claim 19, the temperature is adjusted by varying the salt content between 2-15 %, pg. 7, line 12-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to select values for the ice slurry of Goldstein which are within these ranges for best results in order to efficiently soft freeze the products being tempered, because the optimization of a number of

Art Unit: 3744

variables for a desired purpose from within given ranges is held to be within the ordinary level of skill in the art.

With regards to claim 22, Borrup discloses: wherein the ice slurry comprises approximately 25% ice particles by weight (10-30 % pg. 7, line 8-9), 2% sodium chloride by weight (2-15 %, pg. 7, line 12-13) and the remainder fresh water, whereby the sodium chloride allows for the temperature of the ice slurry to be approximately -2.5 degrees Celsius without the water freezing (these variables are designed to achieve a temperature between -2 - -20 degrees Celsius). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to select values for the ice slurry of Goldstein which are within these ranges for best results in order to efficiently soft freeze the products being tempered, because the optimization of a number of variables for a desired purpose from within given ranges is held to be within the ordinary level of skill in the art.

With regards to claim 24, Burns fails to disclose: wherein the ice slurry is prepared in the supply tank to comprise from about 15% to 25% ice particles and has a temperature from about -1 degrees Celsius to about -2 degrees Celsius. Borrup teaches that an ice slurry of 10 % to 30 % ice (pg. 7, line 8-9) will have a temperature of -2 - -20 degrees Celsius (pg. 3, line 21-23) depending on salt content. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to select values for the ice slurry of Goldstein which are within these ranges for best results in

Art Unit: 3744

order to efficiently soft freeze the products being tempered, because the optimization of a number of variables for a desired purpose from within given ranges is held to be within the ordinary level of skill in the art.

Response to Arguments

10. Applicant's arguments filed November 18, 2008 have been fully considered but moot in view of new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHANIE MCLAREN whose telephone number is (571) 270-7127. The examiner can normally be reached on Monday - Friday 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules & Cheryl Tyler can be reached on (571) 272-6681 & (571)-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 3744

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SDM/

3/9/09

/Frantz F. Jules/

Supervisory Patent Examiner, Art Unit 3744